

INDEPENDENT • NON-PROFIT • SCIENCE  
*protecting public health*



Toxicology Excellence for Risk Assessment  
(TERA)

ANNUAL REPORT  
2017

*This page intentionally left blank.*

# CONTENTS

<b>5</b>	Board of Directors	<b>6</b>	About us	<b>7</b>	Mission		
<b>8</b>	Core Principles and Values	<b>10</b>	Fellows and Visiting Scientists	<b>11</b>	Awards	<b>12</b>	Highlights
<b>13</b>	Publications	<b>14</b>	The Numbers				

*This page intentionally left blank.*

# BOARD OF DIRECTORS

Board Chair

Finance Committee Chair

Gregery S. Romshe, CMA

The Procter & Gamble Company

Audit Committee Chair

Chase D. Wright

Deloitte

President

Patricia McGinnis Ph.D.

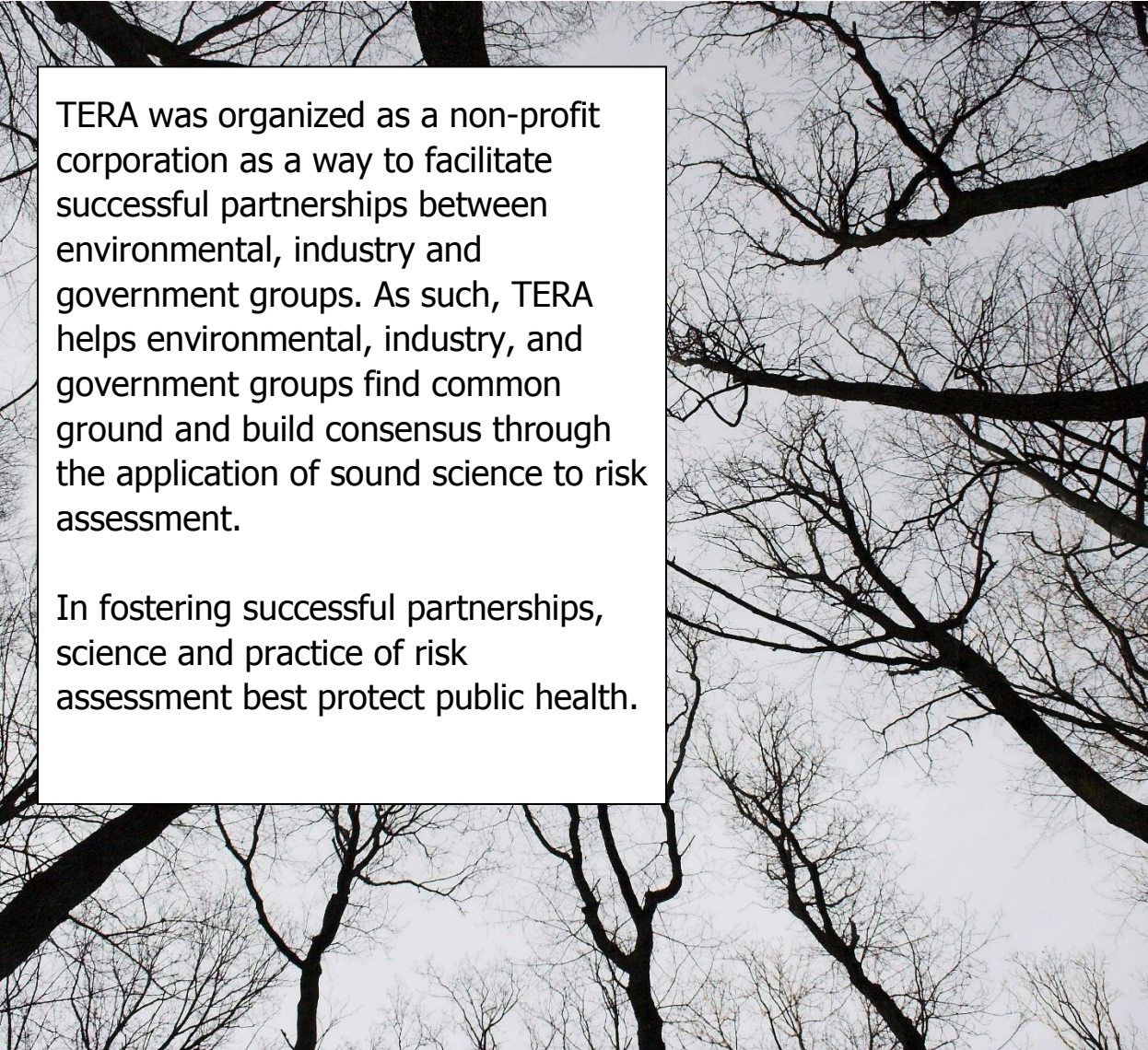
Toxicology Excellence for

Risk Assessment (TERA)



# ABOUT US

Toxicology Excellence for Risk Assessment (TERA) is a 501(c)(3) non-profit corporation dedicated to the best use of toxicity data for risk assessment.



TERA was organized as a non-profit corporation as a way to facilitate successful partnerships between environmental, industry and government groups. As such, TERA helps environmental, industry, and government groups find common ground and build consensus through the application of sound science to risk assessment.

In fostering successful partnerships, science and practice of risk assessment best protect public health.

# MISSION



To support the protection of public health by developing, reviewing and communicating risk assessment values and analyses; improving risk methods through research; and, educating risk assessors, managers, and the public on risk assessment issues.

Independence is essential in order for our science and results to be credible by all parties and groups. TERA has instituted policies and procedures, and maintains a corporate environment that ensures that all of our work efforts are conducted in a manner that maintains our independence. We conduct all our work in a scientifically objective fashion with the results reflecting our best critical analysis and objective evaluation of the scientific information. We are continuously vigilant to make sure that we remain open to new ideas, and are not swayed or influenced by our funding sponsors, or any other party, in reaching conclusions or communicating results.

# CORE PRINCIPLES AND VALUES

## TERA Core Principles and Values

### **Honesty and Integrity**

We operate at the highest level of ethical and scientific standards, fully communicating issues and uncertainties.

### **Independence**

We approach our work with an open mind and objectivity, without regard to sponsor or stakeholder interests.

### **Transparency**

We share our work broadly to maximize benefit to public health.

### **Collaboration**

We use collaboration as a fundamental and preferred approach to technical problem resolution.

These core principles guide day-to-day TERA operations from our consideration of new projects and sponsors, to our scientific evaluations and communication of results. A number of measures insure our work is based upon our principles.

TERA recognizes the importance of independence and scientific objectivity and continually monitors projects and personal work efforts to insure we maintain our high ethical and scientific standards.

- We are transparent about how we do our work and the methods and approaches we use, so that others can evaluate and judge the strength and scientific validity of the conclusions.

- We strive to fully characterize and communicate scientific uncertainties and limitations in our work.
- We are transparent about who funds the work and what role they had, if any, in commenting on the TERA scientific opinions or results. We make it clear to all funders and sponsors of our work that TERA is an independent scientific organization and as such we will provide them our independent scientific evaluation and conclusions. We discuss (prior to starting work) the level and types of involvement of the sponsors and other outside parties.
- We offer our independent scientific services to a broad range of sponsors, including government agencies, industry, non-governmental organizations, nonprofits, and consultants. By collaborating with many types of organizations, TERA gains an appreciation and understanding of the scientific perspectives of these various parties. We utilize this understanding and the resulting relationships to identify and encourage collaboration among a range of parties to improve risk assessment and protection of public health.
- We seek to have a balance of work among public and private sector. In recent years, about 2/3 of our work has been for government agencies and the other 1/3 for industry and others. See: <http://www.tera.org/about/FundingSources.html> for a breakdown by year.
- TERA evaluates each new project to ensure that it is mission-related, will benefit public health, and that TERA's participation will make a quality contribution to the effort. We decline projects that do not meet these criteria.
- We strive to publish our work in the peer-reviewed literature or on our website to make the work available to a broad audience.

In addition to our paid work, TERA provides significant *pro bono* support to local and state governments, NGOs and others to help them address important human health and risk issues.

# VISITING SCIENTISTS AND FELLOWS PROGRAMS



TERA has developed both the Visiting Scientist and Fellow Programs to encourage collaboration with others and to improve risk assessment practices.

**Visiting Scientists** are those engaged with TERA for a fixed period of time or on a defined project. Project work may or may not be onsite at TERA's Cincinnati office. While visiting scientists are often senior, positions can also be considered for scientists beyond the internship level, but for who a period at TERA would be of mutual benefit.

**TERA Fellows** are senior scientists associated with TERA on a longer-term basis with ongoing scientific interactions.

Fellows and Visiting Scientists are not employees of TERA, but rather scientists who share TERA's mission and values and seek to improve the practice of risk assessment. TERA collaborates with Visiting Scientists and/or TERA Fellows on projects of mutual interest.

In the past, scientists have worked with TERA and coauthored manuscripts or reports on a variety of topics, including methods for evaluating persistent and bioaccumulative chemicals, exposure assessment methods, dose-response modeling, mixtures assessment, and investigating the magnitude of adult-to-child toxicokinetic differences in inhalation dosimetry of gases.

# AWARDS

Toxicology Excellence for Risk Assessment (TERA) earned and maintains the Independent Charities Seal of Excellence.



This award is given to the members of Independent Charities of America and Local Independent Charities of America that have, upon rigorous independent review, been able to certify, document, and demonstrate on an annual basis that they meet the highest standards of public accountability, program effectiveness, and cost effectiveness.

These standards include those required by the US Government for inclusion in the Combined Federal Campaign, probably the most exclusive fund drive in the world. Of the 1,000,000 charities operating in the United States today, it is estimated that fewer than 50,000, or 5 percent, meet or exceed these standards, and, of those, fewer than 2,000 have been awarded this Seal.

# 2017 HIGHLIGHTS

In December 2017, TERA's Board of Directors voted to reestablish TERA as the independent non-profit entity it has been since 1995 and to expand its mission to include public education of toxicology and risk assessment.

# STAFF PUBLICATIONS

Chaisson, C.F., K. Diskin, and **P.M. McGinnis**. 2017. User Guide to Consumer Product Safety Commission (CPSC) Tool for Assessing Mold Exposure (TAME) September 2017. Prepared for Consumer Product Safety Commission under Contract CPSC-D-12-001.

**Dourson, M.L.**, Higginbotham, J., Crum, J., Burleigh-Flayer, H., Nance, P., Forsberg, N.D., Lafranconi, M., Reichard, J. 2017. Update: Mode of action (MOA) for liver tumors induced by oral exposure to 1, 4-dioxane. *Regul Toxicol Pharmacol.* 88:45–55.

Becker, R.A., Dellarco, V., Seed, J., Kronenberg, J.M., Meek, B., Foreman, J., Palermo, C., Kirman, C., Linkov, I., Schoeny, R., **Dourson, M.**, Pottenger, L.H., Manibusan, M.K. 2017. Quantitative weight of evidence to assess confidence in potential modes of action. *Regul Toxicol Pharmacol.* 86:205–20.

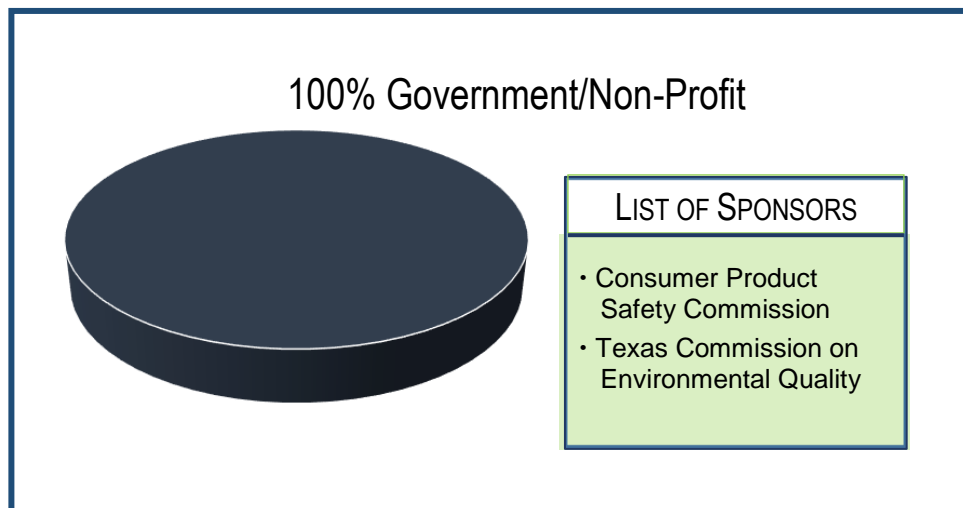
Nance, P., Kroner, O., Haber, L., **Dourson, M.** 2017. Assessing Risks to Human Health. *Comprehensive Toxicology*. Third Edition. 9:3–13.

Thran, B. and **P.M. McGinnis**. 2017. Tool for Assessing Mold Exposure (TAME). Technical Guidance Document. Final Report. June 26, 2017. Prepared for Consumer Product Safety Commission under Contract CPSC-D-12-001.



# THE NUMBERS

## 2017 Project Time by Sponsor



---

Toxicology Excellence For Risk Assessment (TERA)